## Pattern Problem He Rapanga Tauira

## () Task notes. Activity next page.

The purpose of this task is to help your child learn to:

- interpret and describe a pattern, and write a rule for any number ( n ) of elements in a sequential pattern.

This is an important part of algebra.

## Think about this:

- Make sure that a pencil and paper are available.
- Have your child look at the fish pattern and talk about what is happening.
- As they make a table to show the relationship between the number of fish and the number of toothpicks, have them tell you what they notice.
- When your child has written the rule, it is important that they test it to see if it works for any number of fish.
- Encourage them to make another toothpick pattern of their own, and investigate their pattern by repeating the steps in this task.

He tauira kōrero Māori:

| Kua hangaia tēnei tauira ki ētahi rākau <br> iti. Whakamāramatia mai te hanga o <br> tēnei tauira. | These patterns have been made using <br> small sticks. Explain to me how this <br> pattern is built. |
| :--- | :--- |
| E hia ngā rakau iti hei hanga i ia ika? | How many small sticks are needed to <br> make each fish? |
| Me pēhea te whiriwhiri i te maha katoa <br> o ngā rākau iti? | How do you work out the total number <br> small sticks? |
| Mēnā e waru ngā ika, ka hia katoa ngā <br> rākau iti? | lf there were eight fish, how many small <br> sticks would that be? |
| Tuhia he tūtohi hei whakaatu i te maha <br> o ngā ika me te maha o ngā rākau iti. | Write a table to show the parts of the <br> pattern and the number of small sticks. |
| Tuhia he kōrero hei whakamārama i te <br> tauira. | Write a sentence to explain the pattern. |



## Hei Mahi

## He Rapanga Tauira Pattern Problem

He tauira ika tēnei kua hangaia ki te rākau iti.


- Tuhia he tūtohi hei whakaatu i tēnei tauira. Whakaaturia te maha o ngā ika me te maha o ngā rākau iti ki te tūtohi.

- Tuhia he kōrero hei whakamārama i te tauira.

- Tuhia te ture o te tauira.

- Tuhia te maha o ngā rākau iti mēnā:

10 ngā ika $\square$
e 25 ngā ika $\square$
ko te ' $n$ ' hei tohu i te maha o ngā ika $\square$

